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PRODUCT TESTING LABORATORY Final Laboratory Averages Report

Philip Morris USA Confidential

Report Date.: 09/25/98 3:09 PM

Request....: MA98-5

Submitter...: E. Chambers/C. Callicutt

Request Type: inh

Activity : T00107

Reported By...: Peters,Linda W. Date Submitted: 08/13/98

Date Received .: 08/13/98 Date Completed: 08/25/98

Approved By . . . : Peters, Linda W.

Description .: NONE - TO TEST BRANDS FOR MASSACHUSETTS COMPLIANCE

MR4B									
Smoke FTC Butt Length, mm 26.0 34.0 34.0 MA Tar, mg/cigt. 29.5 1.18 20 22.0 0.86 18 MA TPM, mg/cigt. 47.7 2.26 20 33.4 1.69 18 MA Nicotine, mg/cigt. 1.99 0.054 20 1.55 0.061 18 MA Water, mg/cigt. 1.99 0.054 20 9.84 1.005 18 MA Water, mg/cigt. 11.0 0.36 20 9.84 1.005 18 MA PMfs/cigt. 11.0 0.36 20 9.84 1.005 18 MA PMfs/cigt. 2.7 2.0 9.84 1.005 18 MA PMfs/cigt. 25.0 1.07 18 24.2 1.26 19 TX PM in Whole Smoke 5.2 0.00 2 5.1 0.06 2 Filter 2.0 2		MR4B			<u>M</u> L6				
MA Tar, mg/cigt. 29.5 1.18 20 22.0 0.86 18 MA Tar, mg/cigt. 47.7 2.26 20 33.4 1.69 18 MA Tay, mg/cigt. 1.99 0.054 20 33.4 1.69 18 MA Tay, mg/cigt. 1.99 0.054 20 1.55 0.061 18 MA Tay, mg/cigt. 1.99 0.054 20 1.55 0.061 18 MA Water, mg/cigt. 16.21 1.355 20 9.84 1.005 18 MA Puffs/cigt. 11.0 0.36 20 10.8 0.22 18 Tar/Puff, mg 2.7 2.0 MA CO, mg/cigt. 25.0 1.07 18 24.2 1.26 19 TX pH in Whole Smoke 5.2 0.00 2 5.1 0.06 2 Filter Tipping Paper Length, mm 22.8 0.18 20 31.0 0.11 20 Ventilation, % 11 2.2 98 25 2.7 100 Filler Tobacco Weight, g 0.700 0.0021 2 9.657 0.0021 2 (1)Total Alkaloids, mg/cigt. 12.54 0.078 2 12.24 0.170 2 (1)Total Alkaloids, mg/cigt. 30.7 1.67 20 10.9 0.03 2 1		<u>Target</u>	<u>Average</u>	StdDev	N	Tarqet	Average	StdDev	N
MA Tar, mg/cigt. MA TPM, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Nicotine, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA PWIFFS/Cigt. MA CO, mg/cigt. MA PWIFFS/Cigt. MA CO, mg/cigt. MA PUMFS/Cigt. MA CO, mg/cigt. MA CO, mg/c									
MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt. MA Puffs/Cigt. MA Puffs/Cigt. MA Puffs/Cigt. MA CO, mg/cigt. MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Nicotine, mg/cigt. MA Nicotine, mg/cigt. MA MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Nicoti							34.0		
MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt. MA Puffs/Cigt. MA CO, mg/cigt. MA Nicotine, mg/cigt. MA Nicotine, mg/cigt. MA Nicotine, mg/cigt. MA MA Water, mg/cigt. MA Puffs/Cigt. MA			29.5	1.18	20		22.0	0.86	18
MA Water, mg/cigt. MA Puffs/Cigt. MA Puffs/Cigt. MA CO, mg/cigt. MA CO			47.7	2.26	20		33.4	1.69	18
MA Puffs/Cigt. 11.0 0.36 20 10.8 0.22 18 Tar/Puff, mg 2.7 2.0 MA CO, mg/cigt. 25.0 1.07 18 24.2 1.26 19 TX pH in Whole Smoke 5.2 0.00 2 5.1 0.06 2 Filter Tipping Paper Length, mm 22.8 0.18 20 31.0 0.11 20 Ventilation, % 11 2.2 98 25 2.7 100 Filler Tobacco Weight, g 0.700 0.0021 2 0.675 0.0021 2 (1)Total Alkaloids, mg/cigt. 12.54 0.078 2 12.24 0.170 2 (1)Total Alkaloids, mg/cigt. 10.8 0.04 2 10.9 0.03 2 ML6M Test Categories/Tests Target Average StdDev N Target Average StdDev N MA Tar, mg/cigt. 20.9 0.98 20 15.8 0.79 18 MA Tar, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Tar, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Water, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Water, mg/cigt. 1.52 0.065 20 1.12 0.037 18 MA Water, mg/cigt. 10.5 0.30 20 9.5 0.28 18 Tar/Puff, mg 2.0 MA CO, mg/cigt. 20.7 1.12 20 19.7 0.92 18 TX pH in Whole Smoke 5.1 0.03 2 5.0 0.04 2 Filter Tipping Paper Length, mm 31.2 0.30 20 31.7 0.59 20 Ventilation, % 23 2.9 9 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2	MA Nicotine, mg/cigt.				20		1.55	0.061	18
Tar/Puff, mg MA CO, mg/cigt. TX pH in whole Smoke Filter Tipping Paper Length, mm Ventilation, % 11 2.2 98 11 2.2 98 25 2.7 100 Filler Tobacco Weight, g (1)Total Alkaloids, mg/cigt. 10,00 After Grinding, % 10.8 0.04 2 10.9 0.03 2 MME6M Test Categories/Tests Target Average StdDey N MA Tar, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Par, mg/cigt. MA Par, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Par, mg/cigt. MA Par, mg/cigt. MA Par, mg/cigt. MA Par, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Par, mg/cigt. MA Par, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Par, mg/cigt. MA Water, mg/cigt. MA Par, mg/cigt. MA Par, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Par, mg/cigt. MA Par, mg/cigt. MA Par, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Par, mg/cigt. MA Par, mg/cigt. MA Par, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Par, mg/cigt. MA Par, mg/cigt. MA Par, mg/cigt. MA CO, mg/cigt.			16.21	1.352	20		9.84	1.005	18
MA CO, mg/cigt. TX pH in Whole Smoke TX pH in Whole Smoke TX pH in Whole Smoke Tipping Paper Length, mm Tipping Paper Length, mm Yentilation, % Tipping Paper Length, mm Yentilation, % Tipping Paper Length, mm Tipping Paper Length, mm Tobacco Weight, g Target Average StdDev Tobacco Weight, g Target Average StdDev Tobacco Weight, g Target Average StdDev Tobacco Weight, g Toba	MA Puffs/Cigt.		11.0	0.36	20		10.8	0.22	18
TX pH in Whole Smoke Filter Tipping Paper Length, mm 22.8 0.18 20 Ventilation, % 11 2.2 98 25 2.7 100 Filler Tobacco Weight, g 0.700 0.0021 2 0.675 0.0021 2 (1)Total Alkaloids, mg/cigt. 12.54 0.078 2 12.24 0.170 2 (1)OV After Grinding, % 10.8 0.04 2 10.9 0.03 2 MACO, mg/cigt. 34.0 MA Tar, mg/cigt. 20.9 0.98 20 15.8 0.79 18 MA Nicotine, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Nicotine, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Puffs/cigt. 8.32 0.876 20 1.12 0.037 18 MA Puffs/cigt. 8.32 0.876 20 5.38 0.651 18 MA Puffs/cigt. 10.5 0.30 20 9.5 0.28 18 Tar/Puff, mg 2.0 MA CO, mg/cigt. 20.7 1.12 20 19.7 0.92 18 TX pH in Whole Smoke 5.1 0.03 2 5.0 0.04 2 Filter Tipping Paper Length, mm 31.2 0.30 20 31.7 0.59 20 Ventilation, % 23 2.9 99 41 3.3 100 Filter Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2	Tar/Puff, mg		2.7				2.0		
TX pH in Whole Smoke Filter Tipping Paper Length, mm 22.8 0.18 20 31.0 0.11 20 Ventilation, % 11 2.2 98 25 2.7 100 Filler Tobacco Weight, g 0.700 0.0021 2 0.675 0.0021 2 (1)Total Alkaloids, mg/cigt. 12.54 0.078 2 12.24 0.170 2 (1)OV After Grinding, % 10.8 0.04 2 10.9 0.03 2 ML6M Test Categories/Tests MA FIT Butt Length, mm MA Tar, mg/cigt. 20.9 0.98 20 15.8 0.79 18 MA TPM, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Nicotine, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Nicotine, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Water, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Water, mg/cigt. 30.7 1.67 20 5.38 0.651 18 MA Puffs/cigt. 10.5 0.30 20 9.5 0.28 18 Tar/Puff, mg 2.0 1.7 MA CO, mg/cigt. 20.7 1.12 20 19.7 0.92 18 TX pH in Whole Smoke 5.1 0.03 2 5.0 0.04 2 Filter Tipping Paper Length, mm 31.2 0.30 20 31.7 0.59 20 Ventilation, % 23 2.9 99 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2	MA CO, mg/cigt.		25.0	1.07	18		24.2	1.26	19
Filter Tipping Paper Length, mm	TX pH in Whole Smoke		5.2	0.00	2		5.1		
Ventilation, % 11 2.2 98 25 2.7 100 Filler Tobacco Weight, g 0.700 0.0021 2 0.675 0.0021 2 (1)Total Alkaloids, mg/cigt. 12.54 0.078 2 12.24 0.170 2 (1)OV After Grinding, % 10.8 0.04 2 10.9 0.03 2 ML6M Test Categories/Tests Target Average StdDev N Target Average StdDev N Smoke FTC Butt Length, mm 34.0 MA Tar, mg/cigt. 20.9 0.98 20 15.8 0.79 18 MA TPM, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Nicotine, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Water, mg/cigt. 8.32 0.876 20 5.38 0.651 18 MA Puffs/cigt. 10.5 0.30 20 9.5 0.28 18 Tar/Puff, mg 2.0 MA CO, mg/cigt. 20.7 1.12 20 19.7 0.92 18 TX pH in Whole Smoke 5.1 0.03 2 5.0 0.04 2 Filter Tipping Paper Length, mm 31.2 0.30 20 31.7 0.59 20 Ventilation, % 23 2.9 99 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2	Filter								_
Ventilation, % 11 2.2 98 25 2.7 100 Filler Tobacco Weight, g 0.700 0.0021 2 0.675 0.0021 2 (1)Total Alkaloids, mg/cigt. 12.54 0.078 2 12.24 0.170 2 (1)OV After Grinding, % 10.8 0.04 2 10.9 0.03 2 ML6M Test Categories/Tests Target Average StdDev N Target Average StdDev N Smoke FTC Butt Length, mm 34.0 MA Tar, mg/cigt. 20.9 0.98 20 15.8 0.79 18 MA TPM, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Nicotine, mg/cigt. 1.52 0.065 20 1.12 0.037 18 MA Water, mg/cigt. 8.32 0.876 20 5.38 0.651 18 MA Puffs/Cigt. 10.5 0.30 20 9.5 0.28 18 Tar/Puff, mg 2.0 MA CO, mg/cigt. 20.7 1.12 20 19.7 0.92 18 Tx pH in Whole Smoke 5.1 0.03 2 5.0 0.04 2 Filter Tipping Paper Length, mm 31.2 0.30 2 5.0 0.04 2 Filter Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2	Tipping Paper Length, mm		22,8	0.18	20		31.0	0.11	20
Filler Tobacco Weight, g (1)Total Alkaloids, mg/cigt. (1)OV After Grinding, % ML6M	Ventilation, %		11	2.2	98				
(1)Total Alkaloids, mg/cigt. (1)OV After Grinding, % ML6M	Filler							- ' '	
(1)Total Alkaloids, mg/cigt. (1)OV After Grinding, % ML6M	Tobacco Weight, g		0.700	0.0021	2		0.675	0.0021	2
ML6M	(1)Total Alkaloids, mg/cigt.		12.54	0.078					
ML6M MRU6B Test Categories/Tests Target Average StdDev N Target Average StdDev N Smoke FTC Butt Length, mm 34.0 35.0 35.0 15.8 0.79 18 MA Tar, mg/cigt. 20.9 0.98 20 15.8 0.79 18 MA TPM, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Nicotine, mg/cigt. 1.52 0.065 20 1.12 0.037 18 MA Water, mg/cigt. 8.32 0.876 20 5.38 0.651 18 MA Puffs/cigt. 10.5 0.30 20 9.5 0.28 18 Tar/Puff, mg 2.0 1.7									
Test Categories/Tests Target Average StdDev N Target Average StdDev N Smoke FTC Butt Length, mm 34.0 35.0 36.0 35.0 36.7 16.7 20 22.3 3 1.0 18 36.7 16.7 20 22.3 3 1.1 36.51 18 36.51 18 36.51 18 36.51 18 36.51 18 37.7 37.7 37.7 37.7 37.7 37.7 37.7 37.7 37.7 37.7 37.7 37.7 37.7	, ,				-				-
Smoke 34.0 35.0 MA Tar, mg/cigt. 20.9 0.98 20 15.8 0.79 18 MA TPM, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Nicotine, mg/cigt. 1.52 0.065 20 1.12 0.037 18 MA Water, mg/cigt. 8.32 0.876 20 5.38 0.651 18 MA Puffs/Cigt. 10.5 0.30 20 9.5 0.28 18 Tar/Puff, mg 2.0 1.7 1.7 0.92 18 TX pH in Whole Smoke 5.1 0.03 2 19.7 0.92 18 TX pH in Whole Smoke 5.1 0.03 2 5.0 0.04 2 Filter Tipping Paper Length, mm 31.2 0.30 20 31.7 0.59 20 Ventilation, % 23 2.9 99 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1) Total Alkaloids, mg/cigt.		ML6M				MRU6B			
Smoke FTC Butt Length, mm 34.0 35.0 MA Tar, mg/cigt. 20.9 0.98 20 15.8 0.79 18 MA TPM, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Nicotine, mg/cigt. 1.52 0.065 20 1.12 0.037 18 MA Water, mg/cigt. 8.32 0.876 20 5.38 0.651 18 MA Puffs/Cigt. 10.5 0.30 20 9.5 0.28 18 Tar/Puff, mg 2.0 1.7 0.92 18 TX pH in Whole Smoke 5.1 0.03 2 5.0 0.04 2 Filter Tipping Paper Length, mm 31.2 0.30 20 31.7 0.59 20 Ventilation, % 23 2.9 99 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1) Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2	Test_Categories/Tests	Target	Average	StdDev	N	Target	Average	StdDev	N
MA Tar, mg/cigt. 20.9 0.98 20 15.8 0.79 18 MA TPM, mg/cigt. 30.7 1.67 20 22.3 1.10 18 MA Nicotine, mg/cigt. 1.52 0.065 20 1.12 0.037 18 MA Water, mg/cigt. 8.32 0.876 20 5.38 0.651 18 MA Puffs/Cigt. 10.5 0.30 20 9.5 0.28 18 Tar/Puff, mg 2.0 1.7 MA CO, mg/cigt. 20.7 1.12 20 19.7 0.92 18 TX pH in Whole Smoke 5.1 0.03 2 5.0 0.04 2 Filter Tipping Paper Length, mm 31.2 0.30 20 31.7 0.59 20 Ventilation, % 23 2.9 99 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2	Smoke					<u> </u>			
MA TPM, mg/cigt. MA Nicotine, mg/cigt. MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt. MA Puffs/Cigt. MA CO, mg/cigt. MA CO, mg/cigt. Typh in Whole Smoke Filter Tipping Paper Length, mm Ventilation, % Tobacco Weight, g (1) Total Alkaloids, mg/cigt. Todacco Weight, g (1) Total Alkaloids, mg/cigt. Tips 1.67 20 20.7 1.67 20 1.12 0.037 18 8.32 0.876 20 5.38 0.651 18 8.32 0.876 20 5.38 0.651 18 1.7 2.0 1.7 2.0 1.7 2.0 1.7 2.0 2.1 2.0 2.0 2.1 2.0 2.0 2.0	FTC Butt Length, mm		34.0				35.0		
MA Nicotine, mg/cigt. MA Water, mg/cigt. MA Water, mg/cigt. MA Puffs/Cigt. MA Puffs/Cigt. MA CO, mg/cigt. MA Puffs/Cigt. 1.12 0.037 18 1.12 0.030 20 M9.5 0.28 18 1.70 0.92 18 MA CO, mg/cigt. MA Puffs/Cigt. 1.70 0.037 18 MA Water, mg/cigt. 1.70 0.037 18 MA Water, mg/cigt. 1.70 0.037 18 MA Water, mg/cigt. 1.70 0.037 18 1.12 0.037 18 1.70 0.037 18 1.7	MA Tar, mg/cigt.		20.9	0.98	20		15.8	0.79	18
MA Water, mg/cigt. MA Puffs/Cigt. MA Puffs/Cigt. MA Puffs/Cigt. MA CO, mg/cigt. 11.12 20 11.70 0.0010 2 11.70 0.007 2	MA TPM, mg/cigt.		30.7	1.67	20		22.3	1.10	18
MA Puffs/Cigt. 10.5 0.30 20 9.5 0.28 18 Tar/Puff, mg 2.0 1.7 MA CO, mg/cigt. 20.7 1.12 20 19.7 0.92 18 TX pH in Whole Smoke 5.1 0.03 2 5.0 0.04 2 Filter Tipping Paper Length, mm 31.2 0.30 20 31.7 0.59 20 Ventilation, % 23 2.9 99 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2	MA Nicotine, mg/cigt.		1.52	0.065	20		1.12	0.037	18
Tar/Puff, mg 2.0 1.7 MA CO, mg/cigt. 20.7 1.12 20 19.7 0.92 18 TX pH in Whole Smoke 5.1 0.03 2 5.0 0.04 2 Filter Tipping Paper Length, mm 31.2 0.30 20 31.7 0.59 20 Ventilation, % 23 2.9 99 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1) Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2	MA Water, mg/cigt.		8.32	0.876	20			0.651	
Tar/Puff, mg 2.0 1.7 MA CO, mg/cigt. 20.7 1.12 20 19.7 0.92 18 TX pH in Whole Smoke 5.1 0.03 2 5.0 0.04 2 Filter Tipping Paper Length, mm 31.2 0.30 20 31.7 0.59 20 Ventilation, % 23 2.9 99 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2	MA Puffs/Cigt.		10.5	0.30	20		9.5	0.28	18
MA CO, mg/cigt. 20.7 1.12 20 19.7 0.92 18 TX pH in Whole Smoke 5.1 0.03 2 5.0 0.04 2 Filter Tipping Paper Length, mm 31.2 0.30 20 31.7 0.59 20 Ventilation, % 23 2.9 99 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2	Tar/Puff, mg		2.0						
TX pH in Whole Smoke 5.1 0.03 2 5.0 0.04 2 Filter Tipping Paper Length, mm 31.2 0.30 20 31.7 0.59 20 Ventilation, % 23 2.9 99 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2	MA CO, mq/ciqt.		20.7	1.12	20		19.7	0.92	18
Filter Tipping Paper Length, mm 31.2 0.30 20 31.7 0.59 20 Ventilation, % 23 2.9 99 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2									
Ventilation, % 23 2.9 99 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2					_			****	_
Ventilation, % 23 2.9 99 41 3.3 100 Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2	Tipping Paper Length, mm		31.2	0.30	20		31.7	0.59	20
Filler Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2								-	
Tobacco Weight, g 0.655 0.0035 2 0.631 0.0010 2 (1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2				2.7					100
(1)Total Alkaloids, mg/cigt. 11.90 0.156 2 11.70 0.007 2			0.655	0.0035	2		0.631	0.0010	2
	(1)OV After Grinding, %		10.4	0.01	2		10.6	0.04	2

All tests were conducted in the Philip Morris U.S.A., Product Testing Laboratory with the exception of those tests denoted by a (1). These tests were performed by Philip Morris U.S.A. Analytical Methods and Applications Division. The test results relate to the samples submitted to the Product Testing Laboratory during the stated time period. Extrapolation outside this time period is not appropriate.

Doc-Code: P0622 Page 1 of 3 ٠, ٠

PRODUCT TESTING LABORATORY Final Laboratory Averages Report

Philip Morris USA Confidential

Report Date.: 09/25/98 3:09 PM Request....: MA98-5

Submitter...: E. Chambers/C. Callicutt

Request Type: inh

Activity : T00107

Reported By...: Peters, Linda W. Date Submitted: 08/13/98

Date Received .: 08/13/98 Date Completed: 08/25/98

Approved By . . .: Peters, Linda W.

Description .: NONE - TO TEST BRANDS FOR MASSACHUSETTS COMPLIANCE

	MRM6				ML8			
Test Categories/Tests	<u>Target</u>	<u>Average</u>	StdDev	_N_	Target	<u>Average</u>	<u>StdDev</u>	<u>N</u>
Smoke								
FTC Butt Length, mm		34.0				39.0		
MA Tar, mg/cigt.		23.5	1.12	20		23.5	0.89	19
MA TPM, mg/cigt.		36.7		20		32.0	1.49	19
MA Nicotine, mg/cigt.		1.59		20		1.65	0.041	19
MA Water, mg/cigt.		11.55	1.201	20		6.87	0.724	19
MA Puffs/Cigt.		10.6	0.34	20		13.0	0,32	19
Tar/Puff, mg		2.2				1.8		
MA CO, mg/cigt.		23.9	1,41	20		26.5	0.77	19
TX pH in Whole Smoke		5.0	0.00	2		5.1	0.03	2
Filter								
Tipping Paper Length, mm		31.1	0.08	20		36.1	0.26	20
Ventilation, %		15	3.1	98		30	2.7	
Filler								
Tobacco Weight, g		0.673	0.0035	2		0.803	0.0028	2
(1)Total Alkaloids, mg/cigt.		11.93	0.007	2		14.38	0.021	2
(1)OV After Grinding, %		10.9	0.03	2		11.2	0.01	2
• •							5.52	_
	ML8MB				MRM8B			
Test Categories/Tests	Target	Average	StdDev	N	Target	Average	StdDev	
Smoke								
FTC Butt Length, mm		39.0				39.0		
MA Tar, mg/cigt.		22.0	1.39	19		26.0	0,76	19
MA TPM, mg/cigt.		29.8	2,28	19		36.9	1.69	19
MA Nicotine, mg/cigt.		1.54	0.085	19		1.85	0.071	19
MA Water, mg/cigt.		6.30	0.985	19		9.06	1.012	19
MA Puffs/Cigt.		12.6	0.28	19		12.3	0.38	19
Tar/Puff, mg		1.7				2.1		
MA CO, mg/cigt.		26.5	1.20	19		26.6	1.60	19
TX pH in Whole Smoke		5.1	0.05	2		5.1	0.02	2
Filter		0.1	0.05	_		3.1	0.02	
Tipping Paper Length, mm		36.0	0.37	20		36.0	0.09	20
Ventilation, %		34	3.4	99		17	3.7	
Filler		24		,,,		Δ,	3.,	100
Tobacco Weight, q		0.778	0.0078	2		0.789	0.0014	2
		0.110	0.00/0			-	0.0014	4
		13 57	0 007	2		14 20	0 177	2
(1)Total Alkaloids, mg/cigt. (1)OV After Grinding, %		13.57 10.6	0.007 0.01	2 2		14.20 11.1	0.177 0.01	2 2

Notations:

MR4B - MARLBORO KSF B ML6 - MARLBORO LTS KSF ML6M - MARLBORO LTS KSF M MRU6B - MARLBORO ULTRA LTS KSF B

All tests were conducted in the Philip Morris U.S.A., Product Testing Laboratory with the exception of those tests denoted by a (1). These tests were performed by Philip Morris U.S.A. Analytical Methods and Applications Division. The test results relate to the samples submitted to the Product Testing Laboratory during the stated time period. Extrapolation outside this time period is not appropriate.

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flabavg

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PRODUCT TESTING LABORATORY Final Laboratory Averages Report

Philip Morris USA Confidential

Report Date.: 09/25/98 3:09 PM

Request....: MA98-5

Submitter...: E. Chambers/C. Callicutt

Date Submitted: 08/13/98 Date Received .: 08/13/98

Request Type: inh

Date Completed: 08/25/98

Activity : T00107 Approved By . . .: Peters, Linda W.

Reported By...: Peters, Linda W.

Description .: NONE - TO TEST BRANDS FOR MASSACHUSETTS COMPLIANCE

MRM6 - MARLBORO MEDIUM KSF

ML8 - MARLBORO LTS 100

ML8MB - MARLBORO LTS 100 M B

MRM8B ~ MARLBORO MEDIUM 100 B

MR4B - Value #34 rejected -- improper cigarette insertion.

MR4B - Data values flagged as outlier by Dixon (25 vent&29.32,28.28 CO)

ML6 - Data values flagged as outliers by dixon

MRU6B - Lighter failure-Smoke data (tpm, puff count) used bad port program. All related ports rejected. (group 811 run#8). Run#10, port#7 lucite not sealed properly cause leak all related data rejected.

MRM6 - Value #57 was rejected-- broken cigarette.
MRM6 - Value #57 was rejected-- broken cigarette.Value #63 rejected -improper cigarette insertion.

ML8 - Lighter failure-Smoke data(tpm,puff count) used bad port program.

All related ports rejected.

ML8MB - Value #53 rejected--improper cigarette insertion.

ML8MB - Lighter failure-Smoke data (tpm, puff count) used bad port program. All related ports rejected. (group 811 run#8).

cc:

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